

I claim:

1. A mechanical and automatic liquid crystal display device comprising a case, an extendable deck, a coupling mechanism, a display panel holding mechanism and an upward folding adjustment means, wherein:

5 the case is hollow and has a window and a first channeling mechanism and a second channeling mechanism located respectively on two sides corresponding to each other to guide the extendable deck to retract inwards or extend outwards at desired locations;

10 the extendable deck has a front side pivotally engaged with the display panel holding mechanism and is coupled with the first channeling mechanism and the second channeling mechanism for positioning;

 the coupling mechanism is located on one side of the extendable deck to control folding, latching and releasing of the display panel holding mechanism;

15 the display panel holding mechanism has a panel to hold a LCD panel; and

 the upward folding adjustment means is located in the display panel holding mechanism and connected to the extendable deck and has an upward folding actuation assembly to guide the display panel

20 holding mechanism for folding upwards and storing;

 wherein the LCD panel is foldable upwards and storable in the case.

2. The mechanical and automatic liquid crystal display device of claim 1,

wherein the upward folding actuation assembly includes two dampers, two sliding members, and an elevation angle push plate.

3. The mechanical and automatic liquid crystal display device of claim 2,
wherein each of the sliding member has a gear rack on one side, and an
5 axle hole on one side of a top section to pivotally couple with the elevation
angle push plate.

4. The mechanical and automatic liquid crystal display device of claim 2,
wherein the elevation angle push plate has respectively a stub shaft
extended outwards from two end sides to couple with the extendable deck
10 and the two sliding members.

5. The mechanical and automatic liquid crystal display device of claim 1,
wherein the upward folding adjustment means further includes an angle
adjustment assembly to adjust and remember a turning elevation angle of
the display panel holding mechanism.

15 6. The mechanical and automatic liquid crystal display device of claim 5,
wherein the angle adjustment assembly further includes an anchor member,
an anchor push button and an anchor plate.

7. The mechanical and automatic liquid crystal display device of claim 6,
wherein the anchor member includes a strut on a front side thereof to
20 compress a spring located in a spring housing trough, and an anchor gear
rack on a back side thereof.

8. The mechanical and automatic liquid crystal display device of claim 6,

wherein the anchor push button is located on a front side of the display panel holding mechanism and has a plurality of latch struts running through the display panel holding mechanism to fasten to the anchor plate on a back side of the display panel holding mechanism, the anchor plate having a gear rack corresponding to an anchor gear rack of the anchor member.

9. The mechanical and automatic liquid crystal display device of claim 1, wherein the coupling mechanism includes a partition, a first hub and a second hub.

10. The mechanical and automatic liquid crystal display device of claim 9, wherein the partition is located above the extendable deck having a torsional spring housing zone and a notch on one side and two axle holding docks extended from two ends thereof adjacent to the notch.

11. The mechanical and automatic liquid crystal display device of claim 9, wherein the first hub is hollow for housing an axle and has a hook on one side that has a slant surface and a projection on another side, the projection having a trough on a rear side thereof.

12. The mechanical and automatic liquid crystal display device of claim 9, wherein the second hub is hollow for housing an axle and has a lug on one side corresponding to a trough formed on a projection of the first hub and a L-shaped strut extended outwards from another side, and a slant bucking block on another side opposite to the L-shaped strut.

13. The mechanical and automatic liquid crystal display device of claim 1,

wherein the first channeling mechanism has a first elevation sustaining plate and a sliding rod coupling on a sliding block.

14. The mechanical and automatic liquid crystal display device of claim 13,
wherein the first elevation sustaining plate has an elastic reed on a front
5 edge thereof.

15. The mechanical and automatic liquid crystal display device of claim 1,
wherein the second channeling mechanism has a second elevation
sustaining plate and a gear rack.

16. The mechanical and automatic liquid crystal display device of claim 15,
10 wherein the second elevation sustaining plate has an elastic reed on a front
edge thereof.